AMENDMENTS TO THE CLAIMS:

1. (Currently amended) An apparatus for extruding a ceramic molding, comprising:

a molding die, to form a ceramic molding, and

a screw extruder containing an extrusion screw to knead and guide a ceramic material toward the molding die,

wherein said extrusion screw has a pressure screw part provided with a first lead of at least one thread in the form of a spiral ridge, on an outer peripheral surface of a first shaft body and, on a downstream end, a diffusion screw part coaxial to the first shaft body and provided with a second lead of at least one thread in the form of a spiral ridge on an outer peripheral surface of a second shaft body which rotates integrally with the first shaft body,

wherein said diffusion screw part has a diameter larger than that of the pressure screw part, and

wherein said second shaft body of the diffusion screw part has, at least at its downstream end in the axial direction, a diameter reducing part that is tapered so that its ~~whose~~ diameter ~~is reduced toward~~ reduces to its ~~front~~ downstream end, said second lead extending along said diameter reducing part.

2. (Previously presented) An apparatus for extruding a ceramic molding as in Claim 1, wherein said extrusion screw has, between the pressure screw part and the diffusion screw part, a spreading part provided with a spreading lead for spreading the ceramic material in a radially outward direction.

3. (Previously presented) An apparatus for extruding a ceramic molding as in Claim 2, wherein:

said spreading part is provided with a spreading lead that is continuously connected to each thread of the second lead and that is spirally formed on an outer peripheral surface of an intermediate shaft body provided between the first shaft body and the second shaft body whose diameter is larger than that of the first shaft body,

said intermediate shaft body having a diameter which is gradually increased from its first end connected to the first shaft body toward its second end connected to the second shaft body.

4. (Previously presented) An apparatus for extruding a ceramic molding as in Claim 2, wherein:

said spreading lead has a substantially uniform shape in cross section in the axial direction, and is connected to an end of each thread of the second lead, on an outer peripheral surface of an intermediate shaft body provided between the first shaft body and the second shaft body having a diameter larger than that of the first shaft body,

said intermediate shaft body having a diameter substantially equal to that of the first shaft body.

5. (Previously presented) An apparatus for extruding a ceramic molding as in Claim 2, wherein:

said extrusion screw is accommodated in a screw housing which has (a) a hollow small diameter tube of a substantially circular cross section receiving the pressure screw part, (b) a hollow large diameter tube of substantially circular cross section having a diameter larger than that of the small diameter tube, receiving the diffusion screw part and the spreading part, and (c) a spreading wall surface connecting an inner peripheral surface of the small diameter tube and an inner peripheral surface of the large diameter tube, and

a lead end of the spreading lead located on the spreading wall surface side, rotates while maintaining a predetermined distance from the spreading wall surface in the radial direction.

6. (Previously presented) An apparatus for extruding a ceramic molding as in Claim 5, said spreading wall surface being defined by a plane substantially orthogonal to the axial direction of the extrusion screw.

7. (Previously presented) An apparatus for extruding a ceramic molding as in Claim 2, wherein the length from a rear end of the spreading part to a front end of the diffusion screw part is 0.7-1.5 times as long as the screw diameter of the diffusion screw part.

8. (Previously presented) An apparatus for extruding a ceramic molding as in Claim 2, wherein the length of the spreading part in the axial direction is 0.15-0.5 times as long as the screw diameter of the diffusion screw part.

9. (Previously presented) An apparatus for extruding a ceramic molding as in Claim 2, wherein the molding die has a molding outlet configured so that an outer diameter of the extruded ceramic molding is 0.35-0.8 times as large as the screw diameter of the diffusion screw.

10. (Previously presented) An apparatus for extruding a ceramic molding as in Claim 2, wherein the screw diameter of the diffusion screw is greater than the screw diameter of the pressure screw part but smaller than 3.0 times the diameter thereof.

11. (Previously presented) An apparatus for extruding a ceramic molding as in Claim 2, wherein at least one of the diffusion screw part, the spreading part, and the

pressure screw part of the extrusion screw is made of a piece separate from the remaining parts.

12. (Previously presented) An apparatus for extruding a ceramic molding as in Claim 1, said pressure screw part being provided on a downstream end with a shaft bearing of a substantially circular cross section connected to the pressure screw part.

13. (Previously presented) An apparatus for extruding a ceramic molding as in Claim 1, said second lead comprising an even number of threads.

Claim 14. (Canceled).

15. (Previously presented) An apparatus for extruding a ceramic molding as in Claim 1, said molding die is configured to produce a ceramic molding having a honeycomb structure.

16. (Previously presented) An apparatus for extruding a ceramic molding as in Claim 1, wherein a tapered resistance pipe whose inner diameter is reduced toward the molding die is provided between the screw extruder and the molding die.

Claim 17. (Canceled).

18. (Previously presented) An apparatus for extruding a ceramic molding as in Claim 1, wherein said lead has a substantially constant outer diameter along said diffusion screw part, including along said diameter reducing part.